

## High Capacitance Damascene Capacitors

### ABSTRACT

The invention describes a high capacitance damascene  
5 capacitor. A etch-stop/capacitor dielectric layer 60 is  
sandwiched between two conductive plates 40 and 75 to form  
an integrated circuit capacitor. One metal plate 40 is  
copper formed using a damascene process. The high  
capacitance of the structure is due to the thin high k  
10 dielectric material used to form the etch-stop/capacitor  
dielectric layer 60.